

In the Abstract

Please replace Abstract as follows:

A superconducting current limiting device including (a) an interconnected high magnetic permeability structure having a central core coupled to at least a first arm and a second arm branching off therefrom and (b) a superconductive coil surrounding the central core for biasing the central core. In addition, the device includes (c) a first alternating current coil surrounding the first arm and coupled to an alternating current source and (d) a second alternating current coil surrounding the second arm and coupled to an alternating current load. The first and second alternating current coils are magnetically coupled to the central core. The device limits the current passing through the device upon an occurrence of a fault condition in the load.